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PLANT

HARDINESS

ZONE MAP

Miscellaneous Publication No. 814

AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

INDICATOR PLANT EXAMPLES

Following are names of representative persistent plants listed under the coldest zones in which they will normally succeed. Such plants may serve as useful indicators of the cultural possibilities of each zone.

ZONE 1 (below -50° F.)	<i>Betula glandulosa</i> <i>Empetrum nigrum</i> <i>Populus tremuloides</i> <i>Potentilla pensylvanica</i> <i>Rhododendron lapponicum</i> <i>Salix reticulata</i>	Dwarf birch Crowberry Quaking aspen Pennsylvania cinquefoil Lapland rhododendron Netleaf willow
ZONE 2 (-50° to -40° F.)	<i>Betula papyrifera</i> <i>Cornus canadensis</i> <i>Elaeagnus commutata</i> <i>Juniperus communis</i> <i>Picea glauca</i> <i>Potentilla fruticosa</i>	Paper birch Bunchberry dogwood Silverberry Common juniper White spruce Bush cinquefoil
ZONE 3 (-40° to -30° F.)	<i>Elaeagnus angustifolia</i> <i>Lonicera tatarica</i> <i>Malus baccata</i> <i>Parthenocissus quinquefolia</i> <i>Syringa vulgaris</i> <i>Thuja occidentalis</i>	Russian olive Tatarian honeysuckle Siberian crabapple Virginia creeper Common lilac American arbor-vitae
ZONE 4 (-30° to -20° F.)	<i>Berberis thunbergi</i> <i>Hydrangea paniculata</i> <i>Juniperus chinensis</i> <i>Ligustrum amurense</i> <i>Spiraea vanhouttei</i> <i>Taxus cuspidata</i>	Japanese barberry Panicle hydrangea Chinese juniper Amur River privet Vanhoutte spirea Japanese yew
ZONE 5 (-20° to -10° F.)	<i>Cornus florida</i> <i>Deutzia gracilis</i> <i>Forsythia ovata</i> <i>Ligustrum vulgare</i> <i>Parthenocissus tricuspidata</i> <i>Rosa multiflora</i>	Flowering dogwood Slender deutzia Early forsythia Common privet Boston ivy Japanese rose

ZONE 6 (-10° to 0° F.)	<i>Acer palmatum</i> <i>Buxus sempervirens</i> (6b to 7) <i>Forsythia suspensa</i> <i>Hedera helix</i> <i>Ilex opaca</i> <i>Ligustrum ovalifolium</i>	Japanese maple Common box Weeping forsythia English ivy American holly California privet
ZONE 7 (0° to 10° F.)	<i>Azalea</i> Kurume hyb. 'Hinodegiri' <i>Cedrus atlantica</i> <i>Cercis chinensis</i> <i>Chamaecyparis lawsoniana</i> <i>Cotoneaster salicifolia</i> <i>Ilex aquifolium</i>	Red Hussar azalea Atlas cedar Chinese redbud Lawson cypress Willowleaf cotoneaster English holly
ZONE 8 (10° to 20° F.)	<i>Arbutus menziesi</i> <i>Choisya ternata</i> <i>Melia azedarach</i> <i>Olearia haastii</i> <i>Prunus laurocerasus</i> <i>Viburnum tinus</i>	Pacific madrone Mexican orange Chinaberry New Zealand daisy-bush Cherry-laurel Laurestinus
ZONE 9 (20° to 30° F.)	<i>Arbutus unedo</i> <i>Eucalyptus globulus</i> <i>Grevillea robusta</i> <i>Myrtus communis</i> <i>Pittosporum tobira</i> <i>Quercus virginiana</i>	Strawberry tree Tasmanian blue gum Silk-oak Myrtle Japanese pittosporum Live oak
ZONE 10 (30° to 40° F.)	<i>Acacia baileyana</i> <i>Arecastrum romanzoffianum</i> <i>Bougainvillea spectabilis</i> <i>Casuarina equisetifolia</i> <i>Eucalyptus citriodora</i> <i>Ficus macrophylla</i>	Cootamundra wattle Queen palm Bougainvillea Horsetail beefwood (Australian pine) Lemon eucalyptus Moreton bay fig

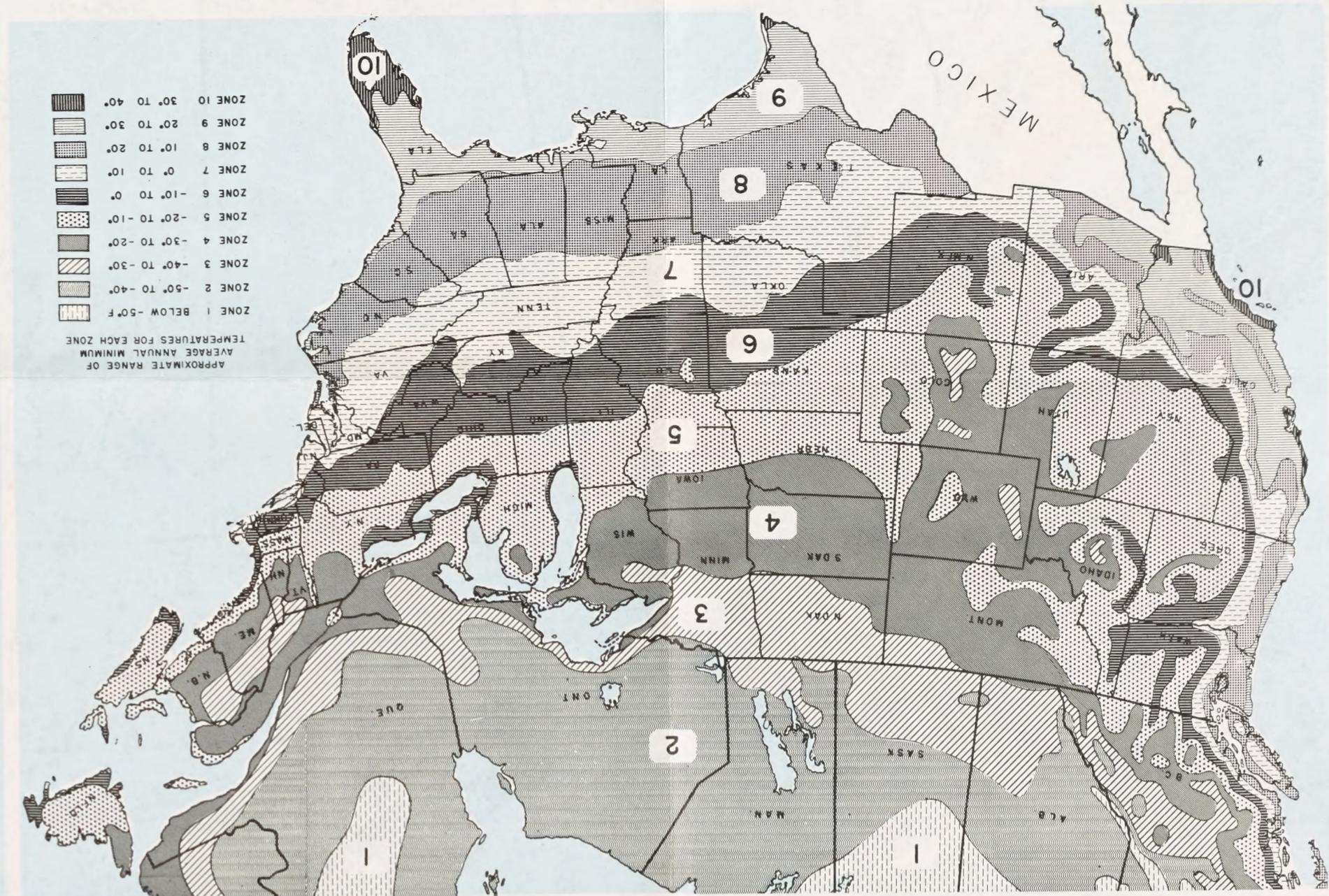
Cold Hardiness Ratings for Some Additional Woody Plants

	Zone	Zone
<i>Abeliophyllum distichum</i> (white forsythia)	5b	<i>Hypericum patulum</i> 'Hidcote' (Hidcote St. Johnswort). 7
<i>Acer platanoides</i> (Norway maple)	4	<i>Iberis sempervirens</i> (evergreen candytuft) 6
<i>Aesculus carnea</i> (red horsechesnut)	4	<i>Ilex crenata convexa</i> (convexleaf Japanese holly). 7
<i>Arctostaphylos uva-ursi</i> (bearberry)	3	<i>Jacaranda acutifolia</i> (jacaranda) 10
<i>Azalea Indian hybrid</i> (Indian azalea)	9	<i>Juglans regia</i> (English or Persian walnut) 6
<i>Azalea Kurume hybrid</i> (Kurume azalea)	7	<i>Juniperus horizontalis</i> (creeping juniper) 3
<i>Azalea Mollis hybrid</i> (Mollis azalea)	5	<i>Koelreuteria paniculata</i> (goldenrain-tree) 6
<i>Bauhinia variegata</i> (purple orchid tree)	10	<i>Laburnum watereri</i> (Waterer laburnum) 6
<i>Berberis darwini</i> (Darwin barberry)	8	<i>Lagerstroemia indica</i> (crapemyrtle) 7
<i>Betula pendula</i> (European white birch)	2	<i>Mahonia aquifolium</i> (Oregon hollygrape) 6
<i>Bouvardia 'Coral'</i> (Coral bouvardia)	9	<i>Malus arnoldiana</i> (Arnold crabapple) 5
<i>Butia capitata</i> (Pindo palm)	8b	<i>Metasequoia glyptostroboides</i> (Dawn red-wood). 5b
<i>Camellia reticulata</i> (reticulata camellia)	9	<i>Nerium oleander</i> (oleander) 8
<i>Camellia sasanqua</i> (sasanqua camellia)	7b	<i>Olea europaea</i> (common olive) 9
<i>Carya pecan</i> 'Major' (pecan)	5 (grows 6 (fruits)	<i>Picea abies</i> (Norway spruce) 2
<i>Ceanothus impressus</i> (Santa Barbara ceanothus)	8	<i>Pieris japonica</i> (Japanese andromeda) 6
<i>Cedrus deodara</i> (deodar cedar)	7b	<i>Pinus mugo mughus</i> (Mugho pine) 3
<i>Chamaecyparis pisifera</i> (Sawara cypress)	4	<i>Pinus radiata</i> (Monterey pine) 7
<i>Cinnamomum camphora</i> (camphor tree)	9	<i>Pinus strobus</i> (white pine) 4
<i>Cistus laurifolius</i> (laurel rock-rose)	7	<i>Raphiolepis indica rosea</i> (pink raphiolepis) 8
<i>Cistus purpureus</i> (purple rock-rose)	8	<i>Rhododendron 'America'</i> (hybrid rhododendron) 5
<i>Cornus alba</i> (Tatarian dogwood)	3	<i>Rhododendron loderi</i> 'King George' (hybrid rhododendron) 8
<i>Cytisus praecox</i> (Warminster broom)	6	<i>Rhododendron 'Purple Splendor'</i> (hybrid rhododendron) 7
<i>Elaeagnus multiflora</i> (cherry multiflora)	5	<i>Rosa rugosa</i> (rugosa rose) 3
<i>Elaeagnus pungens</i> (thorny elaeagnus)	7	<i>Schinus terebinthifolius</i> (Brazilian pepper tree) 9
<i>Eriobotrya japonica</i> (loquat)	8	<i>Sequoia sempervirens</i> (redwood) 8
<i>Euonymus alatus</i> (winged euonymus)	4	<i>Sequoiadendron giganteum</i> (giant sequoia) 7
<i>Euphorbia pulcherrima</i> (poinsettia)	10	<i>Ulmus americana</i> (American elm) 2
<i>Fremontia mexicana</i> (San Diego fremontia)	9	<i>Zelkova serrata</i> (Japanese zelkova) 6
<i>Ginkgo biloba</i> (ginkgo, maidenhair-tree)	5	
<i>Hibiscus rosa-sinensis</i> (Chinese hibiscus)	9b	
<i>Hibiscus syriacus</i> (shrub althea)	6	

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The Zones of Plant Hardiness—This is an adapted version of the color map on the reverse side. It may be useful for small-scale reproduction in books, magazines, and nursery catalogues. This map is not copyrightable, and permission for reproduction in books, magazines, and nursery catalogues is not required.



INDICATOR PLANT EXAMPLES

ZONE 10	<i>Acacia baileyana</i>	Coatimundi walla
ZONE 9	<i>Arbutus unedo</i>	Strawberry tree
ZONE 8	<i>Arbutus menziesii</i>	Pacific madrone
ZONE 7	<i>Azalea Kermesina</i>	Red Huckleberry
ZONE 6	<i>Acer palmatum</i>	Japanese maple
ZONE 5	<i>Cornus florida</i>	Flowering dogwood
ZONE 4	<i>Berberis thunbergii</i>	Japanese barberry
ZONE 3	<i>Elaeagnus angustifolia</i>	Chinese spirea
ZONE 2	<i>Betula papyrifera</i>	Paper birch
ZONE 1	<i>Betula glandulosa</i>	Dwarf birch

below -50° F.	<i>Buxus sempervirens</i>	Common boxwood
-10° to 0° F.	<i>Buxus sempervirens</i> (6b to 7)	Common box
0° to 10° F.	<i>Azalea Kermesina</i>	Red Huckleberry
10° to 20° F.	<i>Arbutus menziesii</i>	Pacific madrone
20° to 30° F.	<i>Arbutus unedo</i>	Strawberry tree
30° to 40° F.	<i>Acacia baileyana</i>	Coatimundi walla
40° to 50° F.	<i>Elaeagnus angustifolia</i>	Chinese spirea
50° to 60° F.	<i>Berberis thunbergii</i>	Japanese barberry
60° to 70° F.	<i>Buxus sempervirens</i>	Common boxwood
70° to 80° F.	<i>Arbutus menziesii</i>	Pacific madrone
80° to 90° F.	<i>Acacia baileyana</i>	Coatimundi walla
90° to 100° F.	<i>Artemesia pannosa</i>	Queen palm
100° to 110° F.	<i>Buxus sempervirens</i>	Boxwood
110° to 120° F.	<i>Artemesia pannosa</i>	Queen palm
120° to 130° F.	<i>Buxus sempervirens</i>	Boxwood
130° to 140° F.	<i>Acacia baileyana</i>	Coatimundi walla
140° to 150° F.	<i>Buxus sempervirens</i>	Boxwood
150° to 160° F.	<i>Acacia baileyana</i>	Coatimundi walla
160° to 170° F.	<i>Buxus sempervirens</i>	Boxwood
170° to 180° F.	<i>Acacia baileyana</i>	Coatimundi walla
180° to 190° F.	<i>Buxus sempervirens</i>	Boxwood
190° to 200° F.	<i>Acacia baileyana</i>	Coatimundi walla
200° to 210° F.	<i>Buxus sempervirens</i>	Boxwood
210° to 220° F.	<i>Acacia baileyana</i>	Coatimundi walla
220° to 230° F.	<i>Buxus sempervirens</i>	Boxwood
230° to 240° F.	<i>Acacia baileyana</i>	Coatimundi walla
240° to 250° F.	<i>Buxus sempervirens</i>	Boxwood
250° to 260° F.	<i>Acacia baileyana</i>	Coatimundi walla
260° to 270° F.	<i>Buxus sempervirens</i>	Boxwood
270° to 280° F.	<i>Acacia baileyana</i>	Coatimundi walla
280° to 290° F.	<i>Buxus sempervirens</i>	Boxwood
290° to 300° F.	<i>Acacia baileyana</i>	Coatimundi walla
300° to 310° F.	<i>Buxus sempervirens</i>	Boxwood
310° to 320° F.	<i>Acacia baileyana</i>	Coatimundi walla
320° to 330° F.	<i>Buxus sempervirens</i>	Boxwood
330° to 340° F.	<i>Acacia baileyana</i>	Coatimundi walla
340° to 350° F.	<i>Buxus sempervirens</i>	Boxwood
350° to 360° F.	<i>Acacia baileyana</i>	Coatimundi walla
360° to 370° F.	<i>Buxus sempervirens</i>	Boxwood
370° to 380° F.	<i>Acacia baileyana</i>	Coatimundi walla
380° to 390° F.	<i>Buxus sempervirens</i>	Boxwood
390° to 400° F.	<i>Acacia baileyana</i>	Coatimundi walla
400° to 410° F.	<i>Buxus sempervirens</i>	Boxwood
410° to 420° F.	<i>Acacia baileyana</i>	Coatimundi walla
420° to 430° F.	<i>Buxus sempervirens</i>	Boxwood
430° to 440° F.	<i>Acacia baileyana</i>	Coatimundi walla
440° to 450° F.	<i>Buxus sempervirens</i>	Boxwood
450° to 460° F.	<i>Acacia baileyana</i>	Coatimundi walla
460° to 470° F.	<i>Buxus sempervirens</i>	Boxwood
470° to 480° F.	<i>Acacia baileyana</i>	Coatimundi walla
480° to 490° F.	<i>Buxus sempervirens</i>	Boxwood
490° to 500° F.	<i>Acacia baileyana</i>	Coatimundi walla
500° to 510° F.	<i>Buxus sempervirens</i>	Boxwood
510° to 520° F.	<i>Acacia baileyana</i>	Coatimundi walla
520° to 530° F.	<i>Buxus sempervirens</i>	Boxwood
530° to 540° F.	<i>Acacia baileyana</i>	Coatimundi walla
540° to 550° F.	<i>Buxus sempervirens</i>	Boxwood
550° to 560° F.	<i>Acacia baileyana</i>	Coatimundi walla
560° to 570° F.	<i>Buxus sempervirens</i>	Boxwood
570° to 580° F.	<i>Acacia baileyana</i>	Coatimundi walla
580° to 590° F.	<i>Buxus sempervirens</i>	Boxwood
590° to 600° F.	<i>Acacia baileyana</i>	Coatimundi walla
600° to 610° F.	<i>Buxus sempervirens</i>	Boxwood
610° to 620° F.	<i>Acacia baileyana</i>	Coatimundi walla
620° to 630° F.	<i>Buxus sempervirens</i>	Boxwood
630° to 640° F.	<i>Acacia baileyana</i>	Coatimundi walla
640° to 650° F.	<i>Buxus sempervirens</i>	Boxwood
650° to 660° F.	<i>Acacia baileyana</i>	Coatimundi walla
660° to 670° F.	<i>Buxus sempervirens</i>	Boxwood
670° to 680° F.	<i>Acacia baileyana</i>	Coatimundi walla
680° to 690° F.	<i>Buxus sempervirens</i>	Boxwood
690° to 700° F.	<i>Acacia baileyana</i>	Coatimundi walla
700° to 710° F.	<i>Buxus sempervirens</i>	Boxwood
710° to 720° F.	<i>Acacia baileyana</i>	Coatimundi walla
720° to 730° F.	<i>Buxus sempervirens</i>	Boxwood
730° to 740° F.	<i>Acacia baileyana</i>	Coatimundi walla
740° to 750° F.	<i>Buxus sempervirens</i>	Boxwood
750° to 760° F.	<i>Acacia baileyana</i>	Coatimundi walla
760° to 770° F.	<i>Buxus sempervirens</i>	Boxwood
770° to 780° F.	<i>Acacia baileyana</i>	Coatimundi walla
780° to 790° F.	<i>Buxus sempervirens</i>	Boxwood
790° to 800° F.	<i>Acacia baileyana</i>	Coatimundi walla
800° to 810° F.	<i>Buxus sempervirens</i>	Boxwood
810° to 820° F.	<i>Acacia baileyana</i>	Coatimundi walla
820° to 830° F.	<i>Buxus sempervirens</i>	Boxwood
830° to 840° F.	<i>Acacia baileyana</i>	Coatimundi walla
840° to 850° F.	<i>Buxus sempervirens</i>	Boxwood
850° to 860° F.	<i>Acacia baileyana</i>	Coatimundi walla
860° to 870° F.	<i>Buxus sempervirens</i>	Boxwood
870° to 880° F.	<i>Acacia baileyana</i>	Coatimundi walla
880° to 890° F.	<i>Buxus sempervirens</i>	Boxwood
890° to 900° F.	<i>Acacia baileyana</i>	Coatimundi walla
900° to 910° F.	<i>Buxus sempervirens</i>	Boxwood
910° to 920° F.	<i>Acacia baileyana</i>	Coatimundi walla
920° to 930° F.	<i>Buxus sempervirens</i>	Boxwood
930° to 940° F.	<i>Acacia baileyana</i>	Coatimundi walla
940° to 950° F.	<i>Buxus sempervirens</i>	Boxwood
950° to 960° F.	<i>Acacia baileyana</i>	Coatimundi walla
960° to 970° F.	<i>Buxus sempervirens</i>	Boxwood
970° to 980° F.	<i>Acacia baileyana</i>	Coatimundi walla
980° to 990° F.	<i>Buxus sempervirens</i>	Boxwood
990° to 1000° F.	<i>Acacia baileyana</i>	Coatimundi walla

100° to 110° F.	<i>Buxus sempervirens</i>	Common boxwood
110° to 120° F.	<i>Buxus sempervirens</i>	Common box
120° to 130° F.	<i>Acacia Kermesina</i>	Red Huckleberry
130° to 140° F.	<i>Arbutus menziesii</i>	Pacific madrone
140° to 150° F.	<i>Arbutus unedo</i>	Strawberry tree
150° to 160° F.	<i>Azalea Kermesina</i>	Red Huckleberry
160° to 170° F.	<i>Arbutus menziesii</i>	Pacific madrone
170° to 180° F.	<i>Arbutus unedo</i>	Strawberry tree
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480° to 490° F.	<i>Azalea Kermesina</i>	Red Huckleberry
490° to 500° F.	<i>Arbutus menziesii</i>	Pacific madrone
500° to 510° F.	<i>Arbutus unedo</i>	Strawberry tree
510° to 520° F.	<i>Azalea Kermesina</i>	Red Huckleberry
520° to 530° F.	<i>Arbutus menziesii</i>	Pacific madrone
530° to 540° F.	<i>Arbutus unedo</i>	Strawberry tree
540° to 550° F.	<i>Azalea Kermesina</i</i>	

PLANT HARDINESS ZONE MAP

